

KUKHARCHIK, N. [Kucharczyk, N.]; ZHVAKOVA, A. [Zvakova, A.]

Identification of catalytic oxidation products of some pyridine bases by the air in the presence of ammonia. Coll Cz Chem 28 no.1:55-60 Ja '63.

1. Nauchno-issledovatel'skiy institut koksokhimii, Zavody im. Trksa, Ostrava.

KONDRAT'YEV, K.Ya.; STYRO, D.B.; ZHVALEV, V.F.

Radiant influx of heat in the spectral range of  $4-40/\mu$  at various levels in the atmosphere. Izv. AN SSSR. Fiz. atm. i okeana 2 no.1:52-63 Ja '66. (MIRA 19:1)

1. Leningradskiy gosudarstvennyy universitet. Submitted July 7, 1965.

MEL'NICHENKO, Ye.L.; BERSHADSKIY, G.Yu.; ZHVALEVSKIY, A.S.

New method for the sealing of glass containers, Kons. i ov.  
prom. 18 no.12:18-20 D '63. (MIRA 17:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy  
promyshlennosti.

DIRO, P.R.; ZHVALEVSKIY, A.S. [Zhvalevs'kyi, A.S.]

Selecting the optimum pressure of the detergent spray for  
washing glass containers. Khar.prom. no.2:81-83 Ap-Je '62,  
(MIRA 5:1549)

1. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy  
promyshlennosti.

(Canned food—Containers)  
(Washing machines)

STANISLAVSKIY, Ye.S.; ZHVANETSKAYA, M.I.

Determining by analytic ultracentrifugation the quantity of  
the components in extracts from Leptospira. Zhur. mikrobiol.  
epid. i immun. 33 no.2:126-127 F '62. (MIRA 15:3)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni I.I.  
Mechnikova.

(LEPTOSPIRA)

(CENTRIFUGATION)

KISTER, I.G.; ZIVANETSKIY, Ye.F.

Efficient method for producing coal alkali reagent. Neft.  
khim. 37 no.2:33-37 F '59. (MIRA 12:4)  
(Chemical tests and reagents)

DENISOV, Petr Ivanovich; ZHVANETSKIY, Yefim Fedorovich; DUBROVINA,  
H.D., ved. red.; POLOSINA, A.S., tekhn. red.

[Preparing and using dry mud in drilling] Proizvodstvo i  
primeneniye glinoporoshkov v burenii. Moskva, Izd-vo  
"Nedra," 1964. 109 p. (MIRA 17:3)

ZHVANETSKIY, Ye.F., red.; KANTAKUZEN, A.V., red.; DUBROVINA, N.D.,  
ved. red.

[Well cementing and water exclusion; data compiled at the All-Union Scientific and Technical Institute for Drilling Technology in October of 1962 at a seminar on the formation of cement stone] Kreplenie skvazhin i razobshchenie plastov; materialy sostoiavshegosia vo VNIIBT v oktjabre 1962 g. seminaru po formirovaniu tsementnogo kamnia. Moskva, Izd-vo "Nedra," 1964. 157 p. (MIRA 17:6)

1. Seminar po formirovaniyu tsementnogo kamnya, 1962.



ZHVANETSKIY, Ye.F., red.; FILATOV, B.S., red.; ISAYEVA, V.V., red.  
red.; VORONOVA, V.V., tekhn. red.

[Fluids for drilling wells; transactions of the inter-  
republic conference in Baku] Promyvochnye rastvory dlia  
bureniia skvazhin; trudy mezhrespublikanskogo soveshchaniia  
v Baku. Moskva, Gostoptekhizdat, 1962. 291 p.

(MIRA 15:9)

(Oil well drilling fluids)

ZHVANETSKIY-ZABOLOTNYY, A.D.

[Tissue therapy by Filator's method in cancerous ulcers of the skin]  
Tkanevaia terapiia po metodu V.P. Filatova pri rakovykh iasvakh koshi.  
Khirurgia, Moskva no.3:74-78 Mr '50. (GLML 19:1)

1. Of the Clinic for General Surgery (Head S.A.Bakkal) of Odessa Medical Institute.

ZHVANIYA, A.P.

Changes in coagulating and anticoagulating systems of the blood  
before and after prostatectomy. Soob. AN Gruz. SSR 38 no. 3:  
715-722 Je '65. (MIRA 18:12)

1. Institut urologii, Tbilisi. Submitted Sept. 25, 1964.

ANTONOVA, R.A.; BARKHUDAROV, E.M.; ZHVANIYA, B.P.; ROSTOMASNVILI, G.I.;  
TSINTSADZE, N.L.

Interaction of shock waves. Zhur. tekhn. fiz. 33 no.9:1137-  
1138 S '63. (MIRA 16:11)

ZHVANIYA, Dmitriy Georgiyevich; SOLOMATINA, Z.D., red. izd-va; IYERUSALIMSKAYA,  
Ye.S., tekhn. red.

[Plates of color designations for geological maps of various scales;  
geological legend] Tablitsy tsvetnykh oboznachenii dlia geologi-  
cheskikh kart raznykh masshtabov (geologicheskaya legenda). Moskva,  
(os. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1960. 5 p.  
18 plates. (MIRA 14:4)

(Geology--Maps)

ZHVANIYA, G.A.; RUSADZE, U.S.; KHETSURIANI, D.S.

Early detection and functional treatment of dysplasia of the  
hip joint in year-old children. Soob. AN Gruz. SSR 40 no.2:  
487-492 N '65.  
(MIRA 19:1)

1. 1-ya Detskaya bol'nitsa, Tbilisi. Submitted March 15, 1965.

ZHVANIYA, G. P. , Cand Med Sci -- (diss) "On the problem of the  
stimulation of <sup>labor activity</sup> ~~the delivery process~~." Tbilisi, 1958. 17 pp (Tbilisi  
State Med Inst). 200 copies  
(KL, 12-58, 102)

-86-

ACC NR: AT7000182

SOURCE CODE: UR/3182/65/002/000/0040/0045

AUTHOR: Davitashvili, T. Sh.; Zhvaniya, M. P.

ORG: none

TITLE: Thermoluminescence and optical absorption spectra of irradiated LiF crystals

SOURCE: AN Gru:SSR. Institut fiziki. Elektronnyye i ionnyye protsessy v tverdykh telakh, v. 2, 1965, 40-45

TOPIC TAGS: neutron irradiation, irradiation effect, gamma irradiation, crystal absorption, crystal lattice dislocation, *thermoluminescence, absorption spectrum*

ABSTRACT: An investigation was made of the generation of dislocations in alkali halide crystals irradiated in an atomic reactor. Specimens  $10 \times 0.8 \times 0.5$  cm taken from a single crystalline ingot were annealed at 700K (one week), cooled slowly (two days) to room temperature, split into smaller  $1.5 \times 0.8 \times 0.5$  m specimens, and separated into three groups. The first group was irradiated in the active zone of a nuclear reactor at a normal temperature (310K, with a thermal neutron intensity of  $1.1 \times 10^{12}$  n/cm<sup>2</sup>·sec), the second was irradiated at low temperature (155K, with a thermal neutron intensity of  $0.55 \times 10^{12}$  n/cm<sup>2</sup>·sec), and the third was irradiated in a radiative gamma-loop at room temperature (dose rate  $8 \times 10^5$  r/hr). With an increase in neutron flux or in gamma-ray dose, the intensity of the low-temperature peaks decreased, dropping to zero, and a new peak (or peaks) formed in the higher-temperature

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ACC NR: AT7000132

region. A displacement of peaks to the high-temperature side and a suppression of low-temperature peaks occurred. These changes were less noticeable in LiF crystals irradiated in the gamma-loop, and were not observed at all in KCl crystals irradiated in the reactor. It is concluded that the changes are the result of a specific neutron effect on LiF crystals: the amplification of the generation of radiative damages of the crystal lattice caused by the products resulting from nuclear reaction on the  $\text{Li}^6$  isotope (high-energy alpha particles appearing in the crystal lattice itself) as the result of the capture of thermal neutrons. Orig. art. has: 5 figures. [JA]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 5109

Card 2/2

ZHVANIYA, T.O.; GACHECHILADZE, M.G.; DZHAPARIDZE, T.N.

Importance of the determination of the thyroid gland function  
by the method of radioactive indicators in a surgical clinic.  
Trudy Inst.eksp.i klin.khir.i gemat AN Gruz.SSR 10:237-245 '62.

(MIRA 16:2)

(THYROID GLAND) (IODINE ISOTOPES)

ZHVANIYA, T.O., zaasl. deyatel' nauk, prof.; SEMENSKAYA, Ye.M., red.;  
YANKOSHVILI, TS.A., red. izd-va; BOKERIA, E.B., tekhn. red.

[Blood transfusion reactions and complications caused by the  
transfusion of bacterially contaminated blood, their prevention  
and treatment] Gemotransfuzionnyye reaktsii i oslozheniya, vyz-  
vannye perelivaniem bakterial'no-zagriznennoi krovi, ikh profi-  
laktika i lechenie. Tbilisi, Izd-vo Akad. nauk Gruzinskoi SSR,  
1961. 87 p.  
(MIRA 15:12)

1. Institut eksperimental'noy i klinicheskoy khirurgii i gema-  
tologii Akademii nauk Gruzinskoy SSR (for Zhvaniya).  
(BLOOD--TRANSFUSION)

YERISTAVI, K.D.; ZHVANIYA, T.O.; KIBADZE, N.N.

Radioactive iodine in the therapy of thyrotoxicoses. Probl. endkok.  
1 gorm. 6 no. 1:102-106 Ja-F '60. (MIRA 14:1)  
(HYPERTHYROIDISM) (IODINE—ISOTOPES)

ERISTAVI, K.D.; ZHVANIYA, T.O.; ODISHVILI, G.Ya. (Tbilisi)

Effect of hibernation and hypothermia on the course of hemotransfusion  
shock in an experiment. Pat. fiziol. i eksp. terap. 5 no.6:30-33  
M-D '61. (MIRA 15:4)

1. Iz Instituta eksperimental'noy i klinicheskoy khirurgii i  
romatologii (dir. - prof. K.D.Eristavi) AN Gruzinskoy SSR.  
(SHOCK) (BLOOD—TRANSFUSION) (ARTIFICIAL HIBERNATION)  
(HYPOTHERMIA)

ZERVANIYA, Ye.I., Cand Med Sci -- (diss) "On the problem  
of studying the clinic of nephritis and changes in certain  
biochemical <sup>indices</sup> ~~indicators~~ in children." Tbilisi, 1959, 18 pp  
(Tbilisi State Med Inst) 200 copies (KL, 34-59, 117)

KHOMYAKOV, K. G., KHOLLER, V. A., ZHVANKO, S. A.

Cadmium

Actual heat capacity of tin and cadmium near the melting point. Vest. Mosk. un., 7, No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October, 1952, ~~1953~~. Unclassified.

33732

S/656/61/000/000/002/007  
D244/D304

21.2100

AUTHORS: Khomyakov, K.G., Spitsyn, V.I., and Zhvanko, S.A.

TITLE: True heat capacity of  $U_3O_8$

SOURCE: Spitsyn, V.I., ed. Issledovaniya v oblasti khimii urana; sbornik statey (Moscow) 1961, 141 - 144

TEXT: The authors measured true heat capacities of  $U_3O_8$  up to  $1000^{\circ}C$ . A method depending on the constant heat flow at a given temperature was used. Accuracy of the determinations was 1 - 2 % up to  $600^{\circ}C$  and 2 - 3 % up to  $1000^{\circ}C$ .  $U_3O_8$  was prepared by heating chemically pure ammonium uranate at  $\sim 800^{\circ}C$ . Before a sample was placed in the calorimeter it was heated slowly to  $600^{\circ}C$  and then slowly cooled to eliminate strains. It was found that  $U_3O_8$  undergoes two phase changes, one at  $770^{\circ}C$  and the other at  $940^{\circ}C$ . Thus  $U_3O_8$  can exist in the form of 3 phases:  $\alpha$ , stable up to  $770^{\circ}C$ ,  $\beta$  ( $770^{\circ} - 940^{\circ}C$ ) and  $\gamma$  (above  $940^{\circ}C$ ). The heat capacities are given in the table. The heats of the phase changes observed were calculated from the measured heat capacities by comparing areas (I) enclosed

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True heat capacity of  $U_3O_8$

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S/656/61/000/000/002/007  
D244/D304

sed by the experimental curve of true heat capacity, temperature axis and two ordinates at the beginning and the end of a transformation and (II) another area calculated from area I bounded by the same ordinates, temperature axis and a heat capacity curve that would exist in the absence of the phase change. The heats were  $265 \pm 5$  cal/mole for the  $\alpha \rightarrow \beta$  transformation and  $1105 \pm 15$  cal/mole for the  $\beta \rightarrow \gamma$  transformation. Secondary heat effects were also observed to take place before the first and the second phase changes (25 and 65 cal/mole respectively) which were due to transformations of the supercooled phases. There are 1 figure, 1 table and 7 references: 1 Soviet-bloc and 6 non-Soviet-bloc. The 4 references to the English-language publications read as follows: J. Dewar, Proc. Roy. Soc., 89A, 158, 1913; G.E. Moore and K.K. Kelly, J. Amer. Chem. Soc. 69, 2105, 1947; A. Southard, ibid., 63, 3142, 1942; C.S. Smith Met. techn., 6, 6, 1939.

Card 2/2

X

KHOMYAKOV, K. G. : KHOLLER, V. A.: ZHVANKO, S. A.

Tin

Actual heat capacity of tin and cadmium near the melting point. Vest. Mosk. un 7  
No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October, 1952, ~~1953~~ <sup>1952</sup> Unclassified.

SOV/76-32-9-39/46

AUTHORS: Shamovskiy, L. M., Rodionova, L. M., Sidorenko, G. A.,  
Zhvanko, Ya. N.

TITLE: On the Polyhedral Substructure of the Single-Crystals of Alkali-Halide Phosphorus (K voprosu o poliedricheskoy substrukture monokristallov shchelочно-galoidnykh fosforov)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 9, pp 2205-2207 (USSR)

ABSTRACT: Monocrystals of alkali-halide phosphorus are prepared by growing them in a solution to which an activator has been added. They have a polyhedron substructure. This results from the two-fold behavior of the activator: one part enters as a solid solution while the other part, usually smaller, forms inner contact surfaces. The substructure shows itself by a cleavage in the interference spots of the Laue exposures, especially after careful annealing. This effect cannot be confused with the doubling of the diffraction patterns which arise through the light penetration of thicker plates. From the publication of the authors (Ref 3) 8 Laue pictures are reproduced. The present article criticizes V. F. Pisarenko (Ref 12), who

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On the Polyhedral Substructure of the Single-Crystals of Alkali-Halide Phosphorus

SOV/76-32-9-39/46

checked part of the papers of the authors. He did not distinguish between cleavage and doubling in the interference spots. Two printing errors in the earlier paper (Ref 3) are corrected here. There are 8 figures and 15 references, 8 of which are Soviet.

Card 2,2

**"APPROVED FOR RELEASE: 09/19/2001**

**CIA-RDP86-00513R002065110003-3**

**APPROVED FOR RELEASE: 09/19/2001**

**CIA-RDP86-00513R002065110003-3"**

51-5-8/26

AUTHORS: Shumovskiy, I.M., Dunina, A.A. and Zhvanko, Yu.N.

TITLE: The Structure of the Alkali Halide Phosphors and the Mechanism of the Processes of their Luminescence.  
(Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminestsentsii)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol. 2, Nr 5, pp. 599-605  
(USSR)

ABSTRACT: The authors study the interaction of electrons and holes with the activator in phosphors. Their results can be given by the band model proposed by Lambe and Klick (14). The latter two authors report luminescence as recombination of holes with electrons localised on the activator in the process of excitation of the phosphor. The authors of this paper supplement this model by limiting the possibility of such recombination to the activator which is situated on contact surfaces. The effect of the activator on the electrical conductivity was studied in crystals of KI and KI-Tl grown in vacuum. These samples were placed between platinum electrodes and heated in electrical furnaces. Their electrical conductivity was measured at 1000 c/s. Dependence

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The Structure of the Alkali Halide Phosphors and the Mechanism of the Processes of their Luminescence. 51-5-8/26

of the electrical conductivity on temperature is given in Fig.2. For pure KI (curve 1) the values in Fig.2 agree with those given in Ref.23. Straight line 2 in Fig.2 is an extrapolation of the intrinsic conductivity of pure KI to low temperatures. Curves 3, 4 and 5 give the conductivity of the KI-Tl phosphor with 0.01% by weight of TlI, 0.1% TlI and 10% TlI respectively. The results indicate that small amounts of TlI in KI decrease the structure-sensitive conductivity of the crystals. These effects are equivalent to strong cooling of KI. The luminescence of the pure crystals and of the phosphors is similar in nature. In both cases the contact surfaces are the places of localisation of electrons and holes which then recombine to emit radiation. The activator changes the properties of the contact surfaces by forming deeper levels of electron localisation. This changes the emission spectrum of the crystal. Small additions of the activator do not materially affect the intrinsic conductivity of the crystals. At high activator concentrations the structure-sensitive conductivity increases. Simultaneously ultraviolet luminescence yield decreases and emission in the visible spectrum becomes

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ZHVANKO, YU. N.

51-6-23/26

AUTHORS: Zhvanko, Yu. N., Morgenshtern, Z. L. and  
Shamovskiy, L. M.

TITLE: Study of the properties of phosphors KI-In and  
KI-Ga. (Issledovaniye svoystv fosforov KI-In i  
KI-Ga.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol. II, Nr. 6,  
pp. 821-823. (USSR)

ABSTRACT: This paper deals with properties of KI phosphors  
activated with analogues of Tl. Single crystals of KI  
activated with various amounts of Tl, In and Ga were  
prepared. All samples were prepared under the same  
conditions in sealed quartz ampoules by the method  
described in Ref. 3. Activators were introduced in  
metallic form. To avoid oxidation the crystals were  
prepared in an atmosphere of hydrogen. When excited  
with a mercury lamp KI-In emits yellow-green and KI-Ga  
orange light. The luminescence spectra of KI-Tl,  
KI-In and KI-Ga are shown in Fig. 1. The absorption  
spectra of the three phosphors are shown in Fig. 2.

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2 HVH AKG, PL-N.

AUTHORS: Shamovskiy, L. M. and Zhvanko, Yu. N.

51-3-10/14

TITLE: Electron-acceptor Levels in Alkali Halide Crystalline Phosphors, which are due to the Activator.  
(Elektronno-aktseptornyye urovni v shchelochnogaloidnykh kristallofosforakh, svyazannyye s aktivatorom.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.3, pp.267-271.  
(USSR)

ABSTRACT: Interaction of the activator in alkali halide phosphors with electrons and holes, which were introduced into the crystal by additive coloring, was studied. This was done by measuring absorption spectra of a KI-Tl crystal after additive coloring in iodine vapours. This coloring process introduces holes and removes an equivalent amount of cations. On subsequent cooling of the crystal some of these holes associate with vacant cation sites and form V-centres. The absorption spectrum of KI-Tl is shown in Fig.1 curve 1. The additional band due to V-centres in KI produced by coloring at 540°C is shown in Fig.1 curve 2. No changes occur in the activator bands and the crystal does not lose its power to luminesce. It is concluded

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Electron-acceptor Levels in Alkali Halide Crystalline Phosphors,  
which are due to the Activator.

51-3-10/14

that holes are not localized by the activator and do not cause transitions of the latter into excited or ionized states. Studies of interaction of electrons at the activator were made for KI-Tl and KI-In phosphors. The absorption spectrum of the latter is shown in Fig.2, curve 1. The activator bands of curve 1 disappear on additive coloring of KI-In in potassium vapours (Fig.2, curve 2). The absorption spectra of colored phosphors NaCl-Hg and KCl-Ag are shown in Fig.3. It was found that the activator was raised to the atomic state by capturing electrons at contact surfaces of polyhedral substructure. The activator band disappears then completely and the crystal loses its ability to luminesce. Additional bands characteristic of the activator atoms and their colloidal aggregates appear in the spectrum. Holes do not interact with the activator and ionized centres of emission are not formed. The results are best represented by a band model proposed by Lambe and Klick (Ref.13) for ZnS phosphors. The latter two authors

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Electron-acceptor Levels in Alkali Halide Crystalline Phosphors,  
which are due to the Activator. 51-3-10/14

Regard luminescence as a recombination of a hole with an electron localised at the activator. The present authors add a limitation that electrons can be localised only at contact surfaces. There are 3 figures and 13 references, 9 of which are Slavic.

ASSOCIATION: All-Union Institute of Mineral Raw Materials.  
(Vsesoyuznyy institut mineral'nogo syr'ya.)

SUBMITTED: January 31, 1957,

AVAILABLE: Library of Congress

Card 5/5

Zhvanko, Yu.N.

SUBJECT: USSR/Luminescence

48-4-34/48

AUTHORS: Shamovskiy L.M. and Zhvanko Yu.N.

TITLE: Surface-Activated Phosphors (Poverkhnostno-aktivirovannyye fosfory)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #4, pp 557-569 (USSR)

ABSTRACT: A number of experimental facts can be interpreted under assumption that crystallophosphors possess microheterogeneous structure due to a double distribution of activators.

In order to check this hypothesis, experiments were performed with KJ activated by thallium and indium. The following results were obtained:

1. Absorption and luminescence spectra of KJ-Tl and KJ-In phosphors do not depend on the type of compounds used for the growth of single crystals, when the activator is present at low concentrations;

2. At the equal (general) activator content, intensities of its bands in the absorption spectrum of crystallophosphors differ sharply from one another.

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TITLE:

Surface-Activated Phosphors (Poverkhnostno-aktivirovannyye fosfory) 48-4-34/48

3. The most soluble compounds of the activator (which form solid substitution solutions with the basic substance of the phosphor) give rise to less intensive bands of additional absorption at equal concentrations.

4. The intensity of activator bands in the phosphor absorption spectrum rises proportionally to the concentration of introduced impurities within certain limits.

In order to investigate the problem, in which of the two states of the activator it forms electron-acceptor levels, single crystals of KCl and NaCl were synthesized with an addition of various quantities of AgCl as an activator.

The dependence of absorption coefficient on the activator concentration is shown in Figure 3 in the article. The result confirms the conclusion on double distribution of the activator, and moreover, indicates that atomic centers arise only on the contact surfaces. It means that the activator creates electron-acceptor levels only on the boundaries of units of the micro-heterogeneous structure.

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TITLE:

Surface-Activated Phosphors (Poverkhnostno-aktivirovannyye fosfory) 48-4-34/48

A new phosphor was produced: single crystals of NaBr activated with InSe. When this phosphor is excited by light, a distinctly expressed photoconductivity is discovered in the activator bands. Photo-current carriers proved to be electrons.

Experimental materials obtained permit to conclude that activating impurities used in the growth of phosphors lead to polyedric structure of crystals. The mosaic structure of alkali-haloid phosphors is their fundamental property. The spectrum of additional absorption is determined by the activator located on intercrystalline surfaces. Deep localization levels of electrons arise on these contact surfaces. Their recombination with holes gives rise to liberation of energy in the form of radiation. The luminescence spectrum is determined by the difference in energies of localized holes and electrons in contact surfaces. Therefore, alkali-haloid phosphors are surface-activated crystals.

The article contains 6 graphs.

The bibliography lists 30 references, of which 14 are Slavic.

Card 3/4

TITLE: Surface-Activated Phosphors (Poverkhnostno-aktivirovannyye fosfory) 48-4-34/48

INSTITUTION: All-Union Institute of Mineral Raw Materials

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress

Card 4/4

ZHVANKO Yu. N.

SUBJECT: USSR/Luminescence

48-5-18/56

AUTHORS: Shamovskiy L.M., Dunina A.A. and Zhvanko Yu.N.

TITLE: Structure of Alkali-Haloid Phosphors and Mechanism of Luminescence processes (Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminestsentsii)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #5, pp 675-677 (USSR)

ABSTRACT: Investigations carried out have shown that:

1. In the presence of holes (and V-centers) the position, shape and intensity of activator bands in alkali-haloid phosphors remains unchanged;
2. On the contrary, the activator localizes electrons. At that, additional absorption bands completely disappear, and at the same time the crystal loses its ability to be luminescent. It was established that the centers of electron localization are in the contact surfaces of polyhedral structure of phosphors.
3. Ions of an activator in the lattice nodes are neither donors nor acceptors of electrons and therefore, take no immediate part in the phenomena of luminescence.

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48-5-18/56

**TITLE:** Structure of Alkali-Haloid Phosphors and Mechanism of Luminescence processes (Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminestsentsii)

4. A new energy model of alkali-haloid phosphors is proposed which takes into account their microheterogeneous structure.

5. A connection between photochemical and luminescent properties of crystals has been established.

6. A dependence of electroconductivity of KJ and KJ(Tl) on temperature and composition has been investigated. It was shown that the maximum in the luminescence spectrum of pure NaJ (band at 303 mμ) corresponds to the energy of interaction of localized electrons and holes in the contact surface.

The report was followed by a discussion.  
One Russian reference is cited.

**INSTITUTION:** All-Union Scientific Research Institute of Mineral Raw Materials.

**PRESENTED BY:**

**SUBMITTED:** No date indicated;

**AVAILABLE:** At the Library of Congress.  
Card 2/2

SUBJECT: USSR/Luminescence

48-5-44/56

AUTHORS: Zhvanko Yu.N., Morgenshtern Z.L. and Shamovskiy L.M.

TITLE: Investigation of the Properties of KJ-In and KJ-Ga Phosphors  
(Issledovaniye svoystv fosforov KJ-In i KJ-Ga)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957,  
Vol 21, #5, p 752 (USSR)

ABSTRACT: Phosphors based on potassium iodide and activated by In and Ga were produced and investigated.

The KJ-In crystals show yellow-green luminescence ( $\lambda_{\text{max}} \sim 50 \text{ m}\mu$ ) and KJ-Ga crystals show orange luminescence ( $\lambda_{\text{max}} \sim 600 \text{ m}\mu$ ) at photoexcitation.

The introduction of In or Ga, as well as Tl, leads to the arising of characteristic activator bands on the long wavelength edge of the internal absorption of a basic substance. In the KJ-In phosphor are observed bands with  $\lambda_{\text{max}} \sim 230 \text{ m}\mu$  and  $262 \text{ m}\mu$  and one weak band with  $\lambda_{\text{max}} \sim 310 \text{ m}\mu$ . In the absorption spectrum of KJ-Ga two intensive bands with  $\lambda_{\text{max}} \sim 230 \text{ m}\mu$ .

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TITLE:

Investigation of the Properties of KJ-In and KJ-Ga Phosphors  
(Issledovaniye svoystv fosforov KJ-In i KJ-Ga)

48-5-44/56

and 248 to 249 m $\mu$  were discovered.

The quantum yield of KJ-In luminescence was found to be 0.97  
and that of KJ-Ga was found to be 0.65 at the excitation by  
 $\lambda$  . 265 m $\mu$ .

Two Russian references are cited.

INSTITUTION: Physical Institute im. Lebedev of the USSR Academy of Sciences  
and All-Union Scientific Research Institute of Mineral Raw  
Materials.

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress

Card 2/2

MAKOKL'N, I.A.; VERNIDUB, I.I.; ZHVANKO, Yu.N.; KARPOV, V.T.;  
RAZUMOVSKAYA, G.S.; VOL'KHOVSKAYA, A.A.

Kinetics of the oxidation of fine magnesium powders at high  
temperatures. Zhur.prikl.khim. 33 no.4:824-831 Ap '60.  
(MIRA 13:9)

1. Monkovskiy ordena Trudovogo Krasnogo Znameni institut  
narodnogo khozyaystva imeni G.V.Plekhanova.  
(Magnesium) (Powder metallurgy) (Oxidation)

5.2100B

80101

S/080/60/033/04/12/045

AUTHORS: Makolkin, I.A., Vernidub, I.I., Zhvanko, Yu.N., Karpov, V.T., Razumovskaya, G.S., Vol'khovskaya, A.A.

TITLE: The Kinetics of Oxidation of Fine Magnesium Powders at Raised Temperatures

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 4, pp 824 - 831

TEXT: This is a continuation of the work in [Ref 11]. The kinetics of the oxidation of fine magnesium powders of the M-3 and M-4 type in an atmosphere of air, oxygen and nitrogen is investigated here. The oxidation was carried out in porcelain crucibles and drip pans which were placed into muffle furnaces. After heating the samples were subjected to roentgen-structural analysis. The temperature range for powders in an air atmosphere was 350 - 500°C, in oxygen 350 - 450°C and in nitrogen 400 - 500°C. It has been established that at temperatures of up to 450°C both powders interact with air, oxygen and nitrogen, the reactions being described by damping curves. This points to the fact that a film of magnesium oxides and nitrides has protective properties up to 450°C. Above this temperature the film loses its protective properties. M-4 powder is more reactive than M-3 powder, which is explained by the large specific surface of M-4 (3,500 cm<sup>2</sup>/g) compared to that of M-3 (616 cm<sup>2</sup>/g). This conclusion agrees with the values of the activation energies: these values for M-4 in air and

Card 1/2

80101

S/080/60/033/04/12/045

The Kinetics of Oxidation of Fine Magnesium Powders at Raised Temperatures

nitrogen are lower and in oxygen higher than for M-3. It has been established that in the case of heating powders at 500°C in the air MgO and Mg<sub>3</sub>N<sub>2</sub> are formed simultaneously. In this case a white, a gray and a yellow layer are formed in the reaction products. The first layer consists mainly of MgO and partly of Mg<sub>3</sub>N<sub>2</sub>, in the second and third layers more Mg<sub>3</sub>N<sub>2</sub> and less MgO is contained, as well as an insignificant amount of Mg(OH)<sub>2</sub>. The reaction product of both powders in nitrogen is Mg<sub>3</sub>N<sub>2</sub>. Thanks are expressed to Ye. S. Makarov from the Institut analiticheskoy khimii AN SSSR (Institute of Analytical Chemistry of the AS USSR).

There are: 5 graphs, 5 tables and 11 references, 2 of which are Soviet, 4 English 1 American, 1 Rumanian, 1 French, 1 German and 1 Japanese.

ASSOCIATION: Moskovskiy ordena Trudovogo Krasnogo Znameni institut narodnogo khoz-yaystva imeni G.V. Plekhanova (Moscow Institute of National Economy imeni G.V. Plekhanov, Bearer of the Order of Labor Red Banner).

SUBMITTED: July 2, 1959

Card 2/2

Zhvanko, Yu. N.

USSR/Physics - X-ray analysis

Card 1/1 Pub. 22 - 13/40

Authors : Shamovskiy, L. M.; Rodionova, L. M.; Sidorenko, G. A.; and Zhvanko, Yu. N.

Title : X-ray investigation of monocrystal phosphori, NaCl & KCl, activated with silver chloride

Periodical : Dok. AN SSSR 99/2, 235-238, Nov 11, 1954

Abstract : Experiments were performed for the purpose of studying the nature of monocrystalline phosphori [NaCl, KCl, NaCl(Ag<sup>+</sup>) and KCl(Ag<sup>+</sup>)]. The experiments were conducted with the help of a special X-ray apparatus. Laue-grams were obtained and studied. The results and conclusions are presented. Eight references; 1-USSR (1923-1954). Illustrations.

Institution : The All-Union Scientific Research Institute for Raw Materials

Presented by: Academician N. V. Belov, June 24, 1954

STANISLAVSKIY, E.S., ZHVANETSKAYA, M.I.

"The antigenic properties of the cellular structure in Escherichia coli."

Report submitted to the Intl. Congress for Microbiology  
Montreal, Canada 19-25 Aug 1962



ZHVANKO, YU. N.

Name : ZHVANKO, YU. N.  
Dissertation : Study of certain properties of alkaline  
halide phosphors activated by thallium  
and indium  
Degree : Cand Tech Sci  
Defended At : All-Union Inst of Mineral Resources, Min  
Geology and Conservation of Natural  
Resources of the USSR  
Publication Date, Place : 1956, Moscow  
Source : Knizhnaya Letopis' No 6, 1957

ZHVANKO, Yu.M.; MORGENSHTERN, Z.L.; SHAMOVSKIY, I.M.

Investigation of the properties of KI-In and KI-Ga phosphors.  
Opt. i spektr. 2 no.6:821-823 Je '57. (MLRA 10:9)

1. Fizicheskiy institut imeni P.N. Lebedeva Akademii nauk SSSR,  
Vsesoyuznyy institut mineral'nogo syr'ya.  
(Phosphors--Spectra)

ZHVANKO, Yu. N.

SHAMOVSKIY, L. M.; ZHVANKO, Yu. N.

Electron-acceptor levels connected with activators in alkalihalide  
crystalline phosphors. Opt. i spektr. 3 no. 3: 267-271 S '57.

(MLRA 10:9)

1. Vsesoyuznyy institut mineral'nogo syr'ya.  
(Phosphors)

"APPROVED FOR RELEASE: 09/19/2001

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**APPROVED FOR RELEASE: 09/19/2001**

**CIA-RDP86-00513R002065110003-3"**

SOV/133-58-6-33/33

AUTHOR: Zhvetin, N.P., Candidate of Technical Sciences

TITLE: In the "Serp i Molot" Plant (Na zavode "Serp i Molot")

PERIODICAL: Stal', 1958, Nr 6, p 575 (USSR).

ABSTRACT: A decrease in the consumption of metal for shrinkage head of shaped castings by using heating exothermic briquettes. Briquettes made from the following mixture were successfully used for heating shrinkage head of castings from 100 to 2 000 kg. The mix: ground coke 50%; ground charcoal 25%; sawdust (dry) 15%, ground refractory clay 5% and sodium nitrate 5%.

Card 1/1 1. Metals--Casting

ZHVIDKOVSKIY, E. G.

USSR/Aluminum Ingots  
Copper Ingots

Feb 47

"The Theory of a Continuous Ingot," A. N. Tikhonov, E. G. Zhvidkovskiy, 16 pp

"Zhur Tekh Fiz" Vol XVII, No 2

Statement of the problem in the form of a partial differential equation relating  $u$  (temperature) to  $t$  (time) and  $x$  (distance). Approximate solution. Practical statement of the problem in the case of aluminum and copper bars, plates and cylinders. Calculation of crystallization.

PA11T24

UDYANSKIY, N.Ya., redaktor; ZHYANETSKIY, Ye.F., redaktor; KOVALEVA, A.A.,  
vedushchiy redaktor; ERDENKO, V.S., tekhnicheskii redaktor

[Improving the quality of well cementing; papers of the All-Union  
Technical Conference] Povyshenie kachestva tsementirovaniya skvazhin:  
materialy Vsesoiuznogo tekhnicheskogo soveshchaniya. Moskva, Gos.  
nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1956. 93 p.  
(MLRA 9:11)

1. Russia (1923- U.S.S.R.) Ministerstvo neftyanoy promyshlennosti.  
Nauchno-tekhnicheskii sovet.  
(Oil well cementing)



ZHVANSKIY, V.A.; KURLYAND, V.P.

[Forage beans] Kormovye boby. [n.p.] Smolenskoe knizhnoe  
izd-vo, [n.d.], 27 p. (MIRA 1747)

NEDOREZOV, V.Yu.; ZHVIK, I.M.

Using the method of photolattice for experimental investigation  
of the nature of deformations caused by blanking and piercing  
of plate materials. Trudy LPI no.250:107-110 '65. (MIRA 18:9)

KOCHETKOV, N.K.; SOKOLOV, S.F.; ZHVIRBLIS, V.Ye.

Oxymethylation of 3, 5-dimethyloxazole. Zhur.VKHO 6 no.4:466-467  
'61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.  
(Oxazole)

SHEYMAN, B.M.; KOST, A.N.; DENISOVA, L.Ya.; ZHVIRBLIS, V.Ye.

Synthesis of amides and hydrazides of  $\beta$ -(2-methoxy(hydroxy)-  
3-alkylphenyl)propionic acids. Vest. Mosk. un. Ser. 2: Khim.  
20 no.1:42-45 Ja-F '65. (MIRA 18:3)

1. Kafedra organicheskoy khimii Moskovskogo universiteta.

ZHVIRBLIS, V. YE., OVODOV, YU. S., KOVHETKOV, N. K., KHORLIN, A. YA.,  
VASKOVSKIY, V. YE. (USSR)

"Investigations of Triterpene Saponins."

Report presented at the 5th International Biochemistry Congress,  
Moscow, 10-16 August 1961

KOCHETKOV, N.K.; KHORLIN, A.Ya.; VAS'KOVSKIY, V.Ye.; ZHVIRELIS, V.Ye.

Triterpenic saponins. Part 1: Saponins from Manchurian aralia.  
Zhur. ob. khim. 31 no.2:658-665 F '61. (MIRA 14:2)

1. Institut khimii prirodnikh soyedineniy AN SSSR.  
(Saponins)

BOYKO, M.S. (Grodenskaya oblast'); ANIS'KO, Ye." (Grodenskaya oblast');  
ZHVIRBLYA, M.A. (Grodenskaya oblast')

Effect of the microclimate of swine houses on the organism of  
animals. Veterinariia 42 no.10:80-82 O '65.

(MIRA 18:10)

ZHVIRBLYANSKAYA, A.Yu.; ISAYEVA, V.S.

Effect of biomydin and terramycin on Achromobacter genus bacteria.  
Trudy TSentr.nauch.-issl.inst.piv., bezalk. i vin.prom. no.11:3-16  
'63. (MIRA 17:9)



ZHVIRBLYANSKAYA, A.Yu.

Selecting the new brewery yeast strains for continuous  
fermentation. Form. i spirt.prom. 30 no.4:22-24 '64.  
(MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut  
pivobezalkogol'noy i vinodel'cheskoy promyshlennosti.

~~ZHYVILYANSKAYA, Adel'ganda Yul'yayna;~~ ZUBENKO, A.P., inzh., spetsred.;  
BELIKOVA, I.S., red.; TARASOVA, N.M., tekhn.red.

[Microbiological control in brewing] Mikrobiologicheskii kontrol'  
pivovarennogo proizvodstva. Moskva, Pishchepromizdat, 1959.

55 p.

(BREWING)

(MICROBIOLOGY)

(MIRA 12:12)

DENSICHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBLYANSKAYA, A.Yu.

Conditions of the formation of diacetyl, acetoin and 2,3 butylerythritol during fermentation. Trudy TSentr.nauch.-issl.inst.piv., bezalk. i vin.prom. no.9:5-12 '62.

Use of the iodometric method for determining aldehydes. 12-14

Some observations concerning the formation of aldehydes under the conditions of continuous fermentation. 14-18

The likeliest sources of the formation of fusel oils under the conditions of alcohol fermentation. 18-22

Some characteristics of yeast cell multiplication under the conditions of continuous fermentation. 22-32

Studying the flocculation capacity of yeast under the conditions of continuous fermentation. 32-39 (MIRA 16:10)

ZHVIRIYANSKAYA, A.Yu.

Effect of the conditions of yeast storage on its fermentive  
activity. Trudy TSentr. nauch.-issl. inst. piv., bezalk. i  
vin. prom. no.10:132-154 '63. (MIRA 17:8)

DENSHCHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBLYANSKAYA, A.Yu.

Disinfection under the conditions of the continuous brewing method.  
Trudy TSentr.nauch.-issl.inst.piv., bezalk. i vin.prom.no.11:77-79  
'63.

(MIRA 17:9)

ZHVIRLYANSKAYA, A.Yu.

Study of the metabolism of some bacteria injurious to brewing.  
Mikrobiologiya 32 no.3: 541-550 My-Je'63 (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivovarennoy  
promyshlennosti.

DENSHCHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBLYANSKAYA, A.Yu.

Study of carbohydrate metabolism in bottom-fermenting brewer's yeast under conditions of continuous flow brewing. Mikrobiologiya 30 no:6: 990-994 N-D '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivovarennoy promyshlennosti, Moskva.  
(YEAST) (CARBON METABOLISM) (BREWING)

DENSHCHIKOV, M.T.; RYLKIN, S.S.; ZHIVIRBYANSKAYA, A.Yu.

Formation of diacetyl and acetoin during the fermentation of  
brewers' wort. Mikrobiologiya 31 no.1:140-145 Ja-F '62.

(MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivovarennoy  
promyshlennosti, Moskva.

(BUTANEDIONE) (BUTANONE) (BREWING)



DENSHCHIKOV, M.T.; RYLKIN, S.S.; ZHVIRBLYANSKAYA, A.Yu.; MOISEYEVA, V.P.;  
BERENTSVEYG, I.A.; BOBIKOV, Ye.V.

Role of diacetyl on the vitality of sedimentary brewers' yeasts.  
Trudy TSentr.nauch.-issl.inst.piv., bezalk.i vin.prom.no.11:16-27 '63.  
(MIRA 17:9)

ZHVIRNLYANSKIY, V.Yu.; BANKOV, D.M.

The BM-2KM electric vacuum furnace for pulling single crystals.  
Biul.tekh.-ekon.inform. no.9:6-7 '61. (MIRA 14:9)  
(Electric furnaces)

ZHVIRBL'ANSKI, J.

A column for technicians. II. p. 267

CUKORIPAR. (Mezőgazdasági és Élelmiszeripari Tudományos Egyesület.  
Cukoripari Szakosztály.) Budapest, Hungary, Vol. 11, No. 10, Oct. 1958.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 7, July 1959.  
Uncla.

ZHVIRBLIANSKII, J.

Influence of various factors on losses of sugar content in making molasses.  
Tr. from the Russian. p. 263.

CUKORIPAR. (Mezogazdasagi es Elelmiszeripari Tudomanyos Egyesulet.  
Cukoripari Szakosztaly) Budapest, Hungary, Vol. 11, No. 10, Oct. 1958.

Monthly list of East European Accessions (EEAT) LC, Vol. 8, No. 7, July 1959.  
Uncla.

KOCHETKOV, N.K.; SOKOLOV, S.D.; ZHVIRBLIS, V.Ye.

Isoxazole series. Part 11: Condensation of isoxazoles with  
aromatic aldehydes. Zhur. ob. khim. 30 no.11:3675-3682 N°60.  
(MIRA 13:11)

1. Moskovskiy gosudarstvennyy universitet.  
(Isoxazole) (Aldehydes)

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCESSES AND PROPERTIES INDEX																			
<p>Preparing alcohols and acids from waste water of sugar manufacture. A. Zhidkov, Yu. Zhvirblyanskii and B. Geradinov. Russ. 32,422, Oct. 31, 1953. "The water is condensed, neutralized with <math>\text{Ca}(\text{OH})_2</math> and heated to 140-150° in an autoclave. The vapors discharged from the autoclave are passed through a rectifying column for the separation of <math>\text{CH}_3\text{OH}</math>, while from the residue after decomposition with <math>\text{H}_2\text{SO}_4</math>, <math>\text{AcOH}</math> is distilled off at atm. pressure and lactic acid is vacuum.</p>																			
<p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p>																			
<p>SECTION 110-111</p>										<p>SECTION 112-113</p>									
<p>SECTION 114-115</p>										<p>SECTION 116-117</p>									

1ST AND 2ND ORDER) PROCESSION AND RE-PROFIT IN 11 1ST AND 2ND ORDER)

28

Continuous crystallization of second-boiling man-  
secuite under conditions of artificial cooling. Yu. S.  
Zhviablyanskii. *Sakhar* 18, No. 4, 7-11 (1939); *CAHWT*  
*indigilite* 43, 687. Continuous crystn. is effected by  
passing the product successively over a series of connected  
crystallizer-kneaders. The mansecuite is cooled to 30-5°  
by means of water passing countercurrent through the  
system. It is then rapidly heated to 45-50° in a special  
heater by means of hot water or steam. This system  
considerably reduces the loss of sugar in the molasses and  
accelerates centrifuging. A. Papineau-Couture

ASB-1LA DETALLURGICAL LITERATURE CLASSIFICATION

15000 170 01104

15000 03-110

15000 03-110

15000 03-110

1ST AND 2ND DEGREE										3RD AND 4TH DEGREE									
PROCESSES AND PROPERTIES INDEX																			
CA		<p style="text-align: right; font-size: 1.5em; font-weight: bold;">24</p> <p style="text-align: center;">           Frothing substance for fire fighting. Yu. M. Zhvir-            blyanskii. U.S.S.R. 65,820, Feb. 24, 1940. Rapeseed            sugar-beet cake is washed free of sugar, placed in an            autoclave, and steamed under conditions accepted for the            production of pectin paste. Air is blown through the            paste, and the foam formed is decanted, broken, and evaporated            until it contains 30-40% of dry matter. M. Hovch         </p>																	
ASSOCIATE METEOROLOGICAL LITERATURE CLASSIFICATION																			
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CLASSIFIED BY										CLASSIFIED BY									
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100 AMT. EXP. CHRGES					
1ST AND 2ND CHRGES	PROCESSES AND PROPERTIES INDEX				
C/A	<p>Frothing extract. Yu. M. Zhvirbul'skii, U.S.S.R. 65,621, Feb. 28, 1946. A froth-forming substance for fighting burning liquids is obtained by hydrolyzing pectin-contg. substances. The hydrolysis is carried out in an autoclave in the presence of alkalis at 175-85° for 1-3 hrs. Pectin paste and expressed sugar-beet cake can be used as starting material. A soln. of KOH, NaOH, CaO, Na<sub>2</sub>CO<sub>3</sub>, or the like can be used as alkalis. To increase the foaming capacity of this product, surface-active substances may be added to it.</p> <p>M. Hosh</p>				
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1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
COMMON ELEMENTS																			
PROCESSES AND PROPERTIES INDEX																			
<p>21</p> <p>A study of sugar-factory molasses. Yu. M. Zhvir, Byanskil and N. Troitskil. <i>Sakharnaya Prom.</i> 19, No. 4/5: 9-14(1946).—Chem. and phys.-chem. properties of edible molasses taken from various factories and from the same factory at various times were studied. The yield of molasses varies widely, depending on the soil and climatic conditions, length and conditions of storing the beets, and technological practices of juice extr., crystall., and clarification. An increased yield of molasses is induced by an increased content of nonsugars including nitrogenous substances, an increased content of Ca salts, and a lower <math>K_2O + Na_2O</math> content. High-grade molasses is characterized by a high ratio of <math>K_2O + Na_2O</math> to <math>CaO</math> in the ash and a lower content of org. nonsugars. The true relation between combined sugar and nonsugar is best reflected in the nature of the exhausted molasses.</p> <p>At. Hirsch</p>																			
<p>28</p>																			
<p>COMMON VARIABLE INDEX</p>																			
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<p>CA</p> <p style="text-align: right;">28</p> <p>Crystallization of masscuite from the second strip.            Yu. M. Zhvirizyanakii. U.S.S.R. 68,332, Apr. 30, 1917.            The second masscuite is divided into 2 parts the larger            of which is crystd. as usual, while the smaller one is com-            bined with the molasses from the larger part after in-            creasing its d. to 88° and the mixt. is subjected to crystn.            M. Hirsch</p>																																																																																																																	
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1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSING AND PROPERTY INDEX																			
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<p>Molasses from sugar factories. Yu. M. Zhvikhlyan-kil, A. K. Volobueva, N. B. Troitskii, and O. P. Abagant. <i>Sakharovaya Prom.</i> 20, No. 3, 14-21(1947).—Thorough comparative analyses of beet molasses from several beet-sugar factories of U.S.S.R. A number of tables and graphs are shown. V. R. Balkov</p>																			
A.S.S. S.A. METALLURGICAL LITERATURE CLASSIFICATION																			
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SUBJECT INDEX										AUTHOR INDEX									

1st AND 2nd ORDER

PROCESSES AND PROPERTIES INDEX

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Exhaustion of final molasses. Yu. M. Zhvritskii. *Sukharnaya Prom.* 20, No. 8, 20-1 (1947).--The final massecuite can be boiled to a higherrix when its purity is high. At the discharge from the vacuum pan the massecuite is sprayed with a predet. amt. of water to prevent the formation of false grains and the massecuite in the crystallizers is dild. with preheated final molasses. The crystallizer massecuite is prepul. for purging by reheating it to the temp. at which the viscosity of the mother liquor is equal to 4000 centipoises. V. K. Raikov

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

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COEFFICIENT OF SUPERSATURATION. Yu. M. Zharibivanski, A. K. Volobueva, and D. R. Abramov. *Sukharskiy. Prem. 21, No. 6, 13-17 (1948).*—The coeff. of supersatn. of impure sugar solns. depends upon the combination of nonsugars, purity, and temp. When purity is low the soly. increases, which means an increase in coeff. of supersatn. On the other hand with higher purities between 80 and 90, the presence of smaller amts. of nonsugars causes the soly. of sucrose to diminish to below 1.0. An increase of temp. raises the coeff. of supersatn. and vice versa. At lower temps. the time required to reach supersatn. increases. V. E. Balkov

ASAC-55A METALLURGICAL LITERATURE CLASSIFICATION

SECTION 10

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1st AND 2nd DED (S)		PRECEDENCE AND PROPERTIES INDEX		1st AND 2nd DED (S)	
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<p>Kinetics of sucrose crystallization in impure sugar solutions. Yu. M. Zhyzhitskiy, A. K. Vokobueva, and D. R. Abramov. <i>Sakharnyye Proiz.</i> 1, 10-15 (1940).--The relation of the rate of crystn. and size of the crystals can be expressed by the empirical formula: <math>S = K l^m</math>; where <math>S</math> = rate of crystn., <math>l</math> = wt. of crystals in g., <math>K</math> = const., which characterizes the abs. meaning of the rate of crystn. in the particular exp., and <math>m</math> = exponent which is less than unity. Several tables, graphs, and formulas as well as description of app. are given. V. B. Baikov</p>					
<p>ASR 51.1 METALLURGICAL LITERATURE CLASSIFICATION</p>					
SECTION 1		SECTION 2		SECTION 3	
SECTION 1		SECTION 2		SECTION 3	

ZHVIRBLYANSKIY, YU., et al.

Technology

Snizhems poter' sakhara v s eklosakharnom proizvodstve (Lowering the loss of sugar in the production of beet sugar). (Moskva), Pishchepromizdat, 1951.

Monthly List of Russian Accessions. Library of Congress, November 1952. UNCLASSIFIED.



ZHVIRBLY INSKIY, YU. M.

Laboratory investigation of the possibility of crystallizing  
sugar without boiling the syrup. Yu. M. Zhvirblyanskiy,  
A. K. Volodavskaya, and D. E. Almagor. Zhurnal  
Nauch. Issledovaniy, Seriya Khim. Nauki, 1958, No. 2, 144.  
66; Referat. Zhur., Akim., 1958, No. 1808. Lab. tests  
showed the possibility of obtaining cryst. sugar by cool-  
ing the syrup to 80° and seeding with a highly dispersed crys-  
talline sugar.  
M. Hosh

ZHVIRBYANSKIĬ, YU. M.

Complex method of boiling massecuite of first product.  
 Yu. M. Zhvirbyanskiĭ. *Sakharnaya Prom.* 27, No. 10,  
 1963. To improve the quality of beet sugar and  
 massecuites and to decrease consumption of steam several  
 details in the art of boiling are recommended. Instead of  
 dilg. white and green molasses with condensate, it should  
 be reheated to 90-95° before introduction into the vacuum  
 pan. Before calandria is completely covered with sirup  
 at the beginning of strike, a certain amt. of steam should  
 be admitted to expel condensate and preheat the heating  
 surface. A small amt. of feed liquor should be introduced  
 at the same time the sugar powder is injected. At the  
 beginning of strike, the supersatn. of mother liquor should  
 be low (1.08-1.10), and the temp. of boiling should be  
 maintained at 75-78°. With decreased purity of mother  
 liquor, the supersatn. can be increased to 1.10-1.12, main-  
 taining the same temp. To eliminate false grains, the  
 massecuite should be concd. up to 92° Brix and two con-  
 secutive drinks of liquor should be admitted into the vacuum  
 pan before the end of the strike. Each drink should last  
 10-15 min. Theory of the complex method of boiling is  
 described. V. E. Bulkov

ZHVIRELYANSKIY, Yu.M.

Two-boiling system with intermediate crystallization of green  
syrup. Sakh.prom. 28 no.6:15-19 '54. (MIRA 7:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sakharnoy  
promyshlennosti.  
(Sugar industry)

ZHVIRBLYANSKIY, YU. M.

USSR/ Chemistry - Sugar-beet residue

Card 1/1 : Pub. 86 - 16/36

Authors : Zhvirblyanskiy, Yu. M., Prof.

Title : Making use of sugar-beet residue

Periodical : Priroda 43/8, 99-100, Aug 1954

Abstract : The chemical content and general characteristics of sugar-beet pulp are stated. Uses for the residue after extracting the sugar are found in industry in the form of glues, and with special treatment the residue can also be made into food for cattle.

Institution : ...

Submitted : ...

The manufacture of beet sugar production with inter-rotation of green. The All-Union Scientific Center of Beet Sugar Industry, Subsector Prom. 10, Nov. 5, 1975, to 1976, determined the effect of the combination with addition of low-grade raw sugar on the yield of beet sugar in the Gerasimov beet-sugar factory. The green molasses from the high-grade manufacture after being reheated to normal was mixed with low-grade sugar, and the mixture obtained in the first crystallizer and cooled in 2 consecutive ones to 25°C. The cooled mixture was then put in a centrifugal separator and reheated for 4 hours. The purity of the green was increased by 15%. Complete data of the process and yield in addition, equipment required for this process was given as well as the scheme of operation.

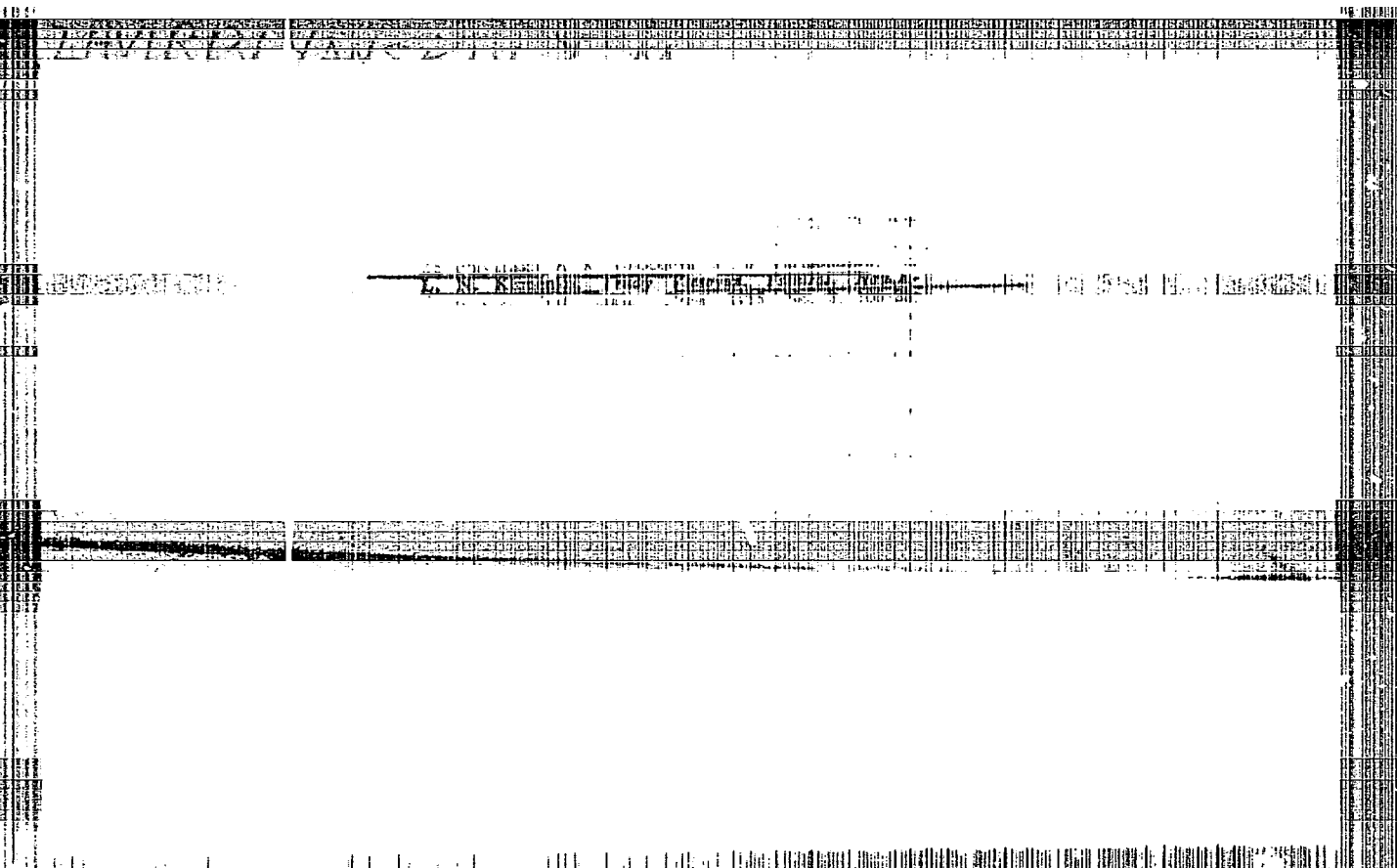
V. B. Balke

ZHVISBLYANSKIY, Yu. M., doktor tekhnicheskikh nauk, professor; GOLUBEVA, A.D.,  
inzhener-tekhnolog; KOSTENKO, A.S., inzhener-tekhnolog.

Two-boiling system with intermediate crystallization of green sirup.  
Trudy TSINS no.4:92-127 '56. (MLRA 10:5)  
(Sugar industry)

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CIA-RDP86-00513R002065110003-3



APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110003-3"

ZHVIRENAS, A. A.

ZHVIRENAS, A. A. -- "Investigation of the Operating of the Soil-Contact Gears of a Caterpillar Motor." Acad Sci Belorussian SSR, Department of Physicomathematical and Technical Sciences, Minsk, 1956. (Dissertation for the Degree of Candidate in TECHNICAL SCIENCES).

SO: KNIZHNYA LETOPIS' (Book Register), No. 42, October 1956, Moscow.



ZHVIRKO, I.S.

ZHVIRKO, I.S.

Heat-power engineering in sugar mills during the forty years of the  
Soviet regime. Sakh. prom. 31 no.11:30-35 N '57. (MIRA 11:1)  
(Sugar industry) (Power engineering)

Zhvirko I.S.  
ZHVIRKO, I.S.

Consultation. Sakh. prom. 31 no.12:67 D '57.  
(Sugar industry)

(MIRA 11:1)

SHEVTSOV, D.S.; ZHVIRKO, I.S.; SHEVTSOV, L.D.

Selection and arrangement of partitions and partition units in  
steam boilers. Sakh.prom. no.4:37-44 Ap 60. (MIRA 13:8)  
(Boilers)

ZHVILKO, I.S.

Society of Polish Sugar Technicians is 40 years old.  
Sakh.prom. 34 no.8:70-72 Ag '60. (MIRA 13:8)  
(Poland--Sugar industry)